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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/674,173	09/29/2003	Kalman Pelhos	I69.12-0556	1945	
	590 12/13/2004		EXAM	EXAMINER	
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING		RICKMAN, HOLLY C			
	HIRD STREET		ART UNIT	PAPER NUMBER	
MINNEAPOLI	JIS, MN 55415-1002		1773		
			DATE MAILED: 12/13/2004	ļ	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applica	ation No.	Applicant(s)	Ū	
	Office Action Summary	10/674		PELHOS ET AL.		
	Onice Action Summary	Examir	ner	Art Unit		
		Holly R	Rickman	1773		
Period f	The MAILING DATE of this comn or Reply	nunication appears on	the cover sheet	with the correspondence add	dress	
- Exte after - If the - If NO - Fails Any	MORTENED STATUTORY PERIOD MAILING DATE OF THIS COMMU ensions of time may be available under the provising SIX (6) MONTHS from the mailing date of this compared by the provising period for reply specified above, the maximur uner to reply within the set or extended period for reply received by the Office later than three monthed patent term adjustment. See 37 CFR 1.704(b)	JNICATION. ions of 37 CFR 1.136(a). In no ommunication. ty (30) days, a reply within the s m statutory period will apply and eply will, by statute, cause the a ths after the mailing date of this	event, however, may statutory minimum of the will expire SIX (6) MO	a reply be timely filed  nirty (30) days will be considered timely.  DNTHS from the mailing date of this con	nmunication.	
Status	-	· /·				
1)	Responsive to communication(s)	filed on 22 Contambo	- 2004			
	This action is <b>FINAL</b> .					
3)□		2b)⊠ This action is	non-tinal.			
٥/١	and the second s	on for allowance excep	ot for formal ma	tters, prosecution as to the	merits is	
	closed in accordance with the pra	iciice under <i>Ex parte</i> (	<i>Quayle</i> , 1935 C.	D. 11, 453 O.G. 213.		
Dispositi	ion of Claims					
4)⊠	Claim(s) 1-40 is/are pending in the	e application.				
	4a) Of the above claim(s) <u>32-40</u> is	/are withdrawn from co	onsideration.			
	Claim(s) is/are allowed.					
6)⊠	Claim(s) 1-7,13-15,18,20,21,25 au	nd 26 is/are rejected.				
	Claim(s) 8-12,16,17,22-24 and 27					
	Claim(s) are subject to rest					
Applicati	on Papers					
	The specification is objected to by	the Evaminar				
10)[\infty]	The drawing(s) filed on 20 Santom	the Examiner.		7		
.0/23	The drawing(s) filed on 29 Septem	iber 2003 is/are: a)	accepted or b)[	objected to by the Exami	ner.	
	Applicant may not request that any ob	ection to the drawing(s)	be held in abeya	nce. See 37 CFR 1.85(a).		
11\\	Replacement drawing sheet(s) includi	ng the correction is requi	ired if the drawing	g(s) is objected to. See 37 CFR	l 1.121(d).	
11/1	The oath or declaration is objected	to by the Examiner. N	lote the attache	d Office Action or form PTO	)-152.	
Priority u	nder 35 U.S.C. § 119					
12)[] / a)[	Acknowledgment is made of a clair ☐ All  b)	m for foreign priority ur	nder 35 U.S.C.	§ 119(a)-(d) or (f).		
	<ol> <li>Certified copies of the priorit</li> </ol>	ty documents have be	en received.			
	2. Certified copies of the priority documents have been received in Application No					
1	3. Copies of the certified copie	s of the priority docum	ents have been	received in this National St	ane	
-	application from the Internat	ional Bureau (PCT Ru	le 17.2(a))	2301100 III tilib National St	uye	
* S	ee the attached detailed Office act	ion for a list of the cert	ified copies not	received		
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ttachment(	• •					
) 🔀 Notice	of References Cited (PTO-892)			Summary (PTO-413)		
)	of Draftsperson's Patent Drawing Review ation Disclosure Statement(s) (PTO-1449 of	(PTO-948)		s)/Mail Date		
niloiiii ہے ، Paper	No(s)/Mail Date <u>4/5/04&amp;9/29/03</u> .	or PTO/SB/08)	5)	nformal Patent Application (PTO-1	52)	
Patent and Tra	demark Office		-,	<u>-</u> ·		
OL-326 (Re	v. 1-04)	Office Action Summa	ary	Part of Paper No./Mail Date	11232004	

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#### **DETAILED ACTION**

1. It is noted that two co-pending applications are referenced on pages 1 and 20 of the specification. The serial numbers of these applications need to be added to the specification.

#### Election/Restrictions

2. Applicant's election of Group I (claims 1-31) in the reply filed on 9/23/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 4-5, 14-15, 18, 20-21 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoma et al. (US 5569523).

Thoma et al. disclose a magnetic recording medium having a seedlayer and magnetic layer disposed on a substrate wherein the magnetic layer has a c-axis and easy axis tilted at an angle with respect to an axis perpendicular to the substrate. The reference teaches the c-axis is

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also the easy axis direction for cobalt (see col. 10, Table 3, Sample 1-5 wherein  $\theta$ 1 and  $\theta$ 2 are 63°, i.e.9, about 60°; col. 15, lines 1-21).

### Claim Rejections - 35 USC § 102/103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 6-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thoma et al. (US 5569523).

Thoma et al. teach all of the limitations of the claims as detailed above, except for the claimed coercivity value. It is the Examiner's contention that the medium taught by Thoma et al. inherently satisfies this claim limitation by virtue of the fact that the reference teaches a magnetic recording layer formed from a Co alloy having the claimed tilting of the c-axis and easy axis.

It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

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7. Claims 1, 3-4 and 13-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hagemeyer et al. (Thin Solid Films, Vol. 230, No. 2, 1993, pp. 199-202) as evidenced by Thoma et al. (US 5569523).

Hagemeyer et al. disclose a magnetic recording medium having a Ti underlayer and a CoCr films epitaxially grown thereon such that the c axis of the CoCr cystal grain layer is at an angle with respect to a line normal to the substrate. The reference teaches that the c-axis angle is 35° (see abstract; Table 1, first data line; second paragraph of the Experimental details section on p. 200). The reference does not explicitly disclose the angle of the easy axis of the magnetic layer.

Thoma et al. teaches the c-axis is also the easy axis direction for a cobalt alloy(see col. 15, lines 12-15).

It is the Examiner's contention that the c-axis and easy axis of the recording medium shown in Table I are inherently equal (i.e., 35° - see first example in Table I). It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

8. Claims 1-2, 5-7, 13-14, 18, 20 and 25-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanahashi et al. (J.

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Magn and Mag. Matl., Vol. 153, No. 3, 1996, pp. 265-272) as evidenced by Thoma et al. (US 5569523).

Tanahashi et al. disclose a magnetic recording medium having a Cr underlayer and a CoCr film epitaxially grown thereon such that the easy axis of the CoCr cystal grain layer is at an angle with respect to a line normal to the substrate. The reference teaches that the crystalline structure of the underlayer and Co layer is tilted at an angle with respect to a line normal to the surface of the substrate (see abstract; Experimental procedures and Results sections on pp. 266-267; Figure 8 and 10 and Conclusions section for teaching of Hc). The reference does not explicitly disclose the angle of the c-axis of the magnetic layer.

Thoma et al. teaches the c-axis is also the easy axis direction for a cobalt alloy(see col. 15, lines 12-15).

Thus, it is the Examiner's contention that the c-axis and easy axis of the recording medium disclosed by Tanahashi et al. are inherently equal. It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

## Allowable Subject Matter

9. Claims 8-12, 16-17, 19, 22-24, and 27-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Holly Rickman Primary Examiner Art Unit 1773

Holly Whh

December 9, 2004